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Deep Draft Vessel Operating Costs 2002

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- Deep-draft vessel operating costs
 - Costs compiled by Maritime Strategies International [MSI] of London based on a framework for assessment of alternatives for vessel chartering, ownership and construction.


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- Deep-draft vessel operating costs
 - MSI collects global vessel operations market data via direct interviews and secondary sources covering –
 - Cargoes; ship trading patterns, fleet capacity; deliveries; deletions [casualties and breakage]; orders; freight rates; newbuildings, resale\secondary markets and scappage vessel type and size or class.
 - Costs estimated for USACE vessel class structure

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- Deep- draft vessel operating costs
 - Prepared for ocean-going\capable self-propelled hulls;
 - Are an estimation of costs as opposed to rates.

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- Deep-draft vessel operating costs
 - Some primary assumptions --
 - General assumption for age – seven years with a life-cycle period for amortization of 20 years [at the water resources discount rate].
 - Fuel prices based on a 5-year moving average.

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- Deep-draft vessel operating costs
 - Costs are estimated according to costs of operation per unit of time relative to general vessel type and class, and general mode of operation -- either in-port or at-sea.
 - Primary difference between in-port and at-sea operating costs is bunkering consumption for propulsion.

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- Deep-draft vessel operating costs
 - Costs as distributed for use contain estimates according to –
 - Generalized costs components
 - Generalized physical specifications

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- Deep-draft vessel operating costs
 - Cost components include
 - Capital replacement
 - Crew\manning
 - Bunkerage consumption
 - Administration\insurance
 - Maintenance and repair
 - Lubes\stores\miscellaneous

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- Deep-draft vessel operating costs
 - Vessel physical characteristics
 - Length overall
 - Breadth or beam
 - Maximum summer loadline draft
 - Immersion rate – TPI
 - Horsepower and speed
 - Fuel consumption and applied price per unit
 - Rated slot capacity

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- Deep-draft vessel operating costs
 - Aggregated according to two general classification of registry –
 - Foreign flag\registry
 - U.S. flag\registry
 - Foreign service
 - Domestic service

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- Deep-draft vessel operating costs
 - With each general grouping\classification for registry costs are estimated according to four general vessel types –
 - Bulk
 - Liquid bulk\tanker – non-double\double hull
 - Containerized cargo carrier – LO\LO
 - General cargo

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- Deep-draft vessel operating costs
 - Foreign registry\flag hulls
 - Bulk carriers -- 15,000 to 200,000 metric dwt; 14 dwt classes
 - Liquid bulk\tankers -- 20,000 to 325,000 metric dwt; 14 dwt classes
 - Containerized cargo carriers; LO\LO -- 9,000 TO 82,000 metric dwt; 13 dwt classes
 - General cargo carriers -- 11,000 to 30,000 metric dwt; 6 dwt classes


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- Deep-draft vessel operating costs
 - U.S. registry\flag hulls
 - Bulk carriers -- 15,000 to 130,000 metric dwt; 10 dwt classes
 - Liquid bulk\tankers -- 20,000 to 265,000 metric dwt; 13 dwt classes
 - Containerized cargo carriers; LO\LO -- 9,000 TO 66,000 metric dwt [foreign trade]; 12 dwt classes, 9,000 to 28,000 metric dwt [domestic trade]; 6 dwt classes
 - General cargo carriers -- 11,000 to 30,000 metric dwt; 6 dwt classes

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- Deep-draft vessel operating costs
 - Application of vessel operation costs often requires some understanding of underlying relationships and may required some interpretation or adaptation depending on the nature of application.

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Changes within Vessel Categories

Containerships


- Containership costs are somewhat mixed
- Foreign flag vessel costs “at sea” dropped about -2% consistently in all vessel size categories and by an average of -7.6% for “in port” costs.
- U.S. Flag vessels showed little change in hourly costs (from - .8% to - 2.6%)

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Bulkers

- Costs for both Foreign and U.S. Flag Bulkers have decreased - 4% to -6 1/2%

General Cargo Ships


- Hourly costs for both Foreign and U.S. Flag vessels show little change. (modest increases of +.2% to +2%)

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Bunkering Costs

- Monitoring of bunker costs have been taken over by Marine Strategies Int'l (MSI)
- Still in the process of calculating a 5-year moving average
- Changes in the cities they documented for that period (ie Philadelphia vs New York)

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Proposed Changes


- Development of a Users Guide to be posted on the web
- Will contract with worldwide fuel broker to monitor bunker costs for up to 45 locations as past of MSI contract and will be able to develop bunkering costs for specific routes

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Proposed Changes (continued)


- Changes in the Vessel cost model to incorporate formatting changes to make it easier to post
- Vessel characteristics will be recalculated by the next vessel costs update

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- Any Questions?

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